

<b>P8Z77 WS Specs</b>	
	
<b>CPU</b>	<p>Intel® Socket 1155 for 3rd/2nd Generation Processors</p> <p>Supports 22/32nm CPU</p> <p>Supports Intel® Turbo Boost Technology 2.0</p> <p>* The Intel® Turbo Boost Technology 2.0 support depends on the CPU types. ** Refer to <a href="http://www.asus.com">www.asus.com</a> for Intel CPU support list</p>
<b>Chipset</b>	Intel® Z77 Express Chipset
<b>Memory</b>	<p>4 x DIMM, max. 32GB, DDR3 2600(O.C.)*/2400(O.C.)*/2200(O.C.)*/2133(O.C.)*/1866(O.C.)*/1600/1333/1066 MHz, non-ECC, un-buffered memory</p> <p>Dual channel memory architecture</p> <p>Supports Intel® Extreme Memory Profile (XMP)</p> <p>* Hyper DIMM support is subject to the physical characteristics of individual CPUs. Please refer to Memory QVL (Qualified Vendors List) for details.</p>
<b>Expansion Slots</b>	<p>4 x PCI Express 3.0/2.0 x16 slots (single at x16, dual at x16 / x16, triple at x16/ x8/ x8, Quad at x8/ x8/ x8/ x8)</p> <p>2 x PCI Express 2.0 x1 slots</p> <p>* PCIe 3.0 speed is supported by Intel® 3rd generation Core™ processors.</p>
<b>VGA</b>	<p>Integrated Graphics Processor- Intel® HD Graphics support</p> <p>Supports DVI-I Port, max. resolution 1920x1200 at 60Hz</p> <p>Supports Intel® InTru™ 3D/Quick Sync Video/Clear Video HD Technology/Insider™</p>
<b>Multi-GPU support</b>	<p>Supports AMD® 4-Way CrossFire™ Technology</p> <p>Supports NVIDIA® 4-Way SLI™ Technology</p> <p>Supports LucidLogix Virtu MVP Technology*</p> <p>* LucidLogix Virtu MVP supports Windows 7 operating systems.</p>
<b>Storage</b>	<p>Intel® Z77 Express Chipset:</p> <ul style="list-style-type: none"> <li>- 2 x SATA 6Gb/s ports with RAID 0,1,5 and 10 support</li> <li>- 4 x SATA 3Gb/s ports with RAID 0,1,5 and 10 support</li> <li>- Supports Intel® Smart Response Technology, Intel® Rapid Start Technology, Intel® Smart Connect Technology.</li> </ul> <p>Marvell® 9128 SATA controllers:</p> <ul style="list-style-type: none"> <li>- 2 x SATA 6Gb/s ports with RAID 0, 1 support</li> </ul> <p>ASMedia® SATA 6Gb/s controller**</p> <ul style="list-style-type: none"> <li>- 2 x eSATA 6Gb/s ports with port multiplier support</li> </ul> <p>* Supports on Intel® Core™ processor family with Windows 7 operating systems.</p> <p>** These SATA ports are for data hard drivers only. ATAPI devices are not supported.</p>
<b>LAN</b>	2*Intel® 82574L Gigabit LAN controller
<b>Audio</b>	<p>Realtek® ALC898 8-channel high definition audio CODEC</p> <ul style="list-style-type: none"> <li>- Absolute Pitch 192khz/24bit true BD lossless sound</li> <li>- BD audio layer content protection</li> </ul> <p>- DTS UltraPC II</p> <p>- DTS Connect</p> <p>- Supports jack-detection, multi-streaming, front panel jack-retasking</p> <p>- Optical S/PDIF out port at back I/O</p>
<b>USB</b>	<p>2 x ASMedia USB 3.0 controllers- supports ASUS USB 3.0 Boost UASP Mode.</p> <ul style="list-style-type: none"> <li>- 2 x USB 3.0/2.0 ports at back panel(blue)</li> </ul> <p>Intel® Z77 Express Chipset- supports ASUS USB 3.0 Boost UASP Mode.*</p> <ul style="list-style-type: none"> <li>- 2 x USB 3.0/2.0 ports at mid-board for front panel support</li> <li>- 2 x USB 3.0/2.0 ports at back panel(blue)</li> </ul> <p>Intel® Z77 Express Chipset</p> <ul style="list-style-type: none"> <li>- 9 x USB 2.0/1.1 ports (5 ports at mid-board, 4 ports at back panel)</li> </ul> <p>* The USB 3.0 ports only support Windows® 7 or later versions. UASP standard only supports Windows® 8.</p>
<b>SMART DIGI+</b>	<ul style="list-style-type: none"> <li>- Smart DIGI+ Key- quickly delivers higher VRM frequency, voltage and current for superior CPU/GPU/DRAM overclocking performance with one switch.</li> <li>- Smart CPU Power Level (VRD 12.5 Ready)- provides the best digital power saving conditions.</li> </ul>
<b>CPU Power</b>	<ul style="list-style-type: none"> <li>- Industry leading digital 20-phase power design (16-phase for CPU, 4-phase for iGPU).</li> <li>- ASUS CPU power utility</li> </ul>
<b>DRAM Power</b>	<ul style="list-style-type: none"> <li>- Industry leading digital 2-phase DRAM power design</li> <li>- ASUS DRAM power utility</li> </ul>
<b>ASUS TPU</b>	<ul style="list-style-type: none"> <li>- Auto Tuning, TurboV</li> <li>- TPU Switch</li> </ul>
<b>ASUS EPU</b>	<ul style="list-style-type: none"> <li>- EPU Utility</li> <li>- EPU Switch</li> </ul>
<b>ASUS Exclusive Features</b>	<ul style="list-style-type: none"> <li>- ASUS SSD Caching</li> <li>- Network iControl featuring instant network bandwidth domination for top network program in use</li> <li>- USB 3.0 Boost featuring the latest USB 3.0 UASP standard</li> <li>- USB Charger+ featuring quick-charging function for all smart devices</li> <li>- AI Charger+</li> <li>- Disk Unlocker featuring 3TB+ HDD support</li> <li>- AI Suite II</li> <li>- Anti Surge</li> <li>- MemOK!</li> </ul>

<b>ASUS Quiet Thermal Solution</b>	<ul style="list-style-type: none"> <li>- ASUS Fan Xpert 2 featuring Fan Auto Tuning function for optimized speed control</li> <li>- ASUS Fanless Design: Heat-pipe solution</li> </ul>
<b>ASUS EZ DIY</b>	<ul style="list-style-type: none"> <li>- ASUS USB BIOS Flashback with USB BIOS Flashback Wizard for EZ BIOS download scheduling</li> <li>- ASUS UEFI BIOS EZ Mode featuring friendly graphics user interface</li> <li>- ASUS O.C. Tuner</li> <li>- ASUS CrashFree BIOS 3</li> <li>- ASUS EZ Flash 2</li> </ul>
<b>ASUS Q-Design</b>	<ul style="list-style-type: none"> <li>- ASUS Q-code</li> <li>- ASUS Q-Shield</li> <li>- ASUS Q-LED (CPU, DRAM, VGA, Boot Device LED)</li> <li>- ASUS Q-Slot</li> <li>- ASUS Q-DIMM</li> <li>- ASUS Q-Connector</li> </ul>
<b>Workstation Unique Features</b>	<ul style="list-style-type: none"> <li>- 4 PCIe x16 slots</li> <li>- Quick Gate:1 vertical USB 2.0 on board</li> <li>- ASUS SAssaby series Cards support</li> <li>- ASUS WS Diag. LED</li> <li>- WS 3-color LED</li> </ul>
<b>Back Panel I/O Ports</b>	<ul style="list-style-type: none"> <li>4 x USB 3.0/2.0 ports (blue, 1 supports USB BIOS Flashback)</li> <li>4 x USB 2.0/1.1 ports</li> <li>1 x USB BIOS Flashback switch</li> <li>1 x PS/2 KB/MS port</li> <li>1 x DVI-I Port</li> <li>2 x eSATA ports</li> <li>2 x LAN (RJ45) ports (2 x Intel® LAN)</li> <li>1 x Optical S/PDIF Out port</li> <li>8-channel Audio I/O</li> </ul>
<b>Internal I/O connectors</b>	<ul style="list-style-type: none"> <li>1 x USB 3.0/2.0 connector support additional 2 USB ports (19-pin)</li> <li>2 x USB 2.0/1.1 connectors support additional 4 USB ports</li> <li>1 x USB 2.0/1.1 trp A vertical port</li> <li>4 x SATA 6.Gb/s connectors (2 x gray; 2 x navy blue)</li> <li>4 x SATA 3.0Gb/s connectors (blue)</li> <li>1 x CPU Fan connector (4-pin)</li> <li>1 x CPU Opt Fan connectors (4-pin)</li> <li>4 x Chassis Fan connectors (4-pin)</li> <li>1 x Front panel audio connector (AAFP)</li> <li>1 x S/PDIF Out header</li> <li>1 x Clear CMOS button</li> <li>1 x 24-pin EATX Power connector</li> <li>1 x 8-pin EATX 12V Power connector</li> <li>1 x 4-pin EZ PLUG Power connector(s)</li> <li>1 x System Panel (Q-Connector)</li> <li>1 x MemOK! Button</li> <li>1 x CPU switch</li> <li>1 x TPU switch</li> <li>1 x Power-on switch</li> <li>1 x Reset button</li> </ul>
<b>BIOS Features</b>	64 MB Flash ROM, UEFI AMI BIOS, PnP, DMI2.0, WFM2.0, SM BIOS 2.5, ACPI 2.0a, Multi-language BIOS, ASUS EZ Flash 2, ASUS CrashFree BIOS 3, F12 PrintScreen, F3 Shortcut Function and ASUS DRAM SPD (Serial Presence Detect) memory information
<b>Manageability</b>	WFM 2.0, DMI 2.0, WOL by PME, PXE
<b>Accessories</b>	<ul style="list-style-type: none"> <li>4 x Serial ATA 6Gb/s cables</li> <li>2 x Serial ATA 3Gb/s cables</li> <li>1 x ASUS 4-Way SLI bridge connector</li> <li>1 x ASUS 3-Way SLI bridge connector</li> <li>1 x ASUS SLI bridge connector</li> <li>2 in 1 Q-connector</li> <li>I/O Shield</li> <li>User's manual</li> </ul>
<b>Support DVD</b>	<ul style="list-style-type: none"> <li>Drivers</li> <li>ASUS Utilities</li> <li>ASUS Update</li> <li>Anti-virus software (OEM version)</li> </ul>
<b>Form Factor</b>	ATX Form Factor, 12" x 9.6" (30.5cm x 24.4cm)